SANSUI

SERVICE MANUAL

CD-E570

COMPACT DISC PLAYER

CAUTION

1. Parts identified by the ⚠ symbol on the schematic diagram and the parts list are critical for safety.
   Use only replacement parts that have critical characteristics recommended by the manufacturer.
2. Make leakage-current or resistance measurements to determine that exposed parts are acceptably insulated from the supply circuit before returning the appliance to the customer.

•SPECIFICATIONS

Format	Compact disc, digital audio
Pick-up	3-beam, semiconductor laser
No. of channels	2 channels (stereo)
Decoding (D/A)	16-bit linear
Frequency response	5 Hz ~ 20 kHź ± 0.5 dB
Total harmonic distortion	Less than 0.003% (1 kHz)
Signal-to-noise ratio (S/N)	Better than 100 dB
Dynamic range	Better than 95 dB
Wow and flutter	Below measurable limit
Output voltage/load impedance	
OUTPUT	2V/47 kohms
Power requirements	AC 110V/120V/220V/240V, 50/60 Hz
For U.S.A. & Canada	AC 120V, 60 Hz
Power consumption	10 watts
Dimensions	380 mm (15") W 82 mm (3-3/16") H 276 mm (10-7/8") D
Weight	3.7 kg (8.2 lbs) net

- **Design and specifications subject to changes without notice for improvements.**
- **Due to local laws and regultions, this unit sold in some areas are not equipped with variable voltage selectors.**

NOTE

1. The symbols, UL, CSA, SA, BS, UK, EU, AS, SEV, XX <EXPORT> and XX-V <EXPORT(V)> on the parts list and the schematic diagram mean followings respectively.

UL	Manufactured for U.S.A market. (Underwriters Laboratories approved model.)
CSA	Manufactured for Canadian market.
SA	Manufactured for South African market.
BS, UK	Manufactured for United Kingdom market.
EU	Manufactured for European market.
AS	Manufactured for Australian market.
SEV	Manufactured for Swiss market.
SS	Manufactured for Saudi Arabian market.
XX <EXPORT>	Standard Version with Inner Voltage Selector.
XX-V <EXPORT(V)>	Standard Version with Outer Voltage Selector.
NON MARK	Common Parts.

2. Some printed circuit boards are not supplied assembled. To separate these in this service manual, the stock numbers are not indicated for these boards. However, stock numbers for individual parts are indicated.

3. Since some capacitors and resistors are omitted from parts lists in this service manual, refer to the Common Parts List for capacitors and resistors, which was issued on June 1987.

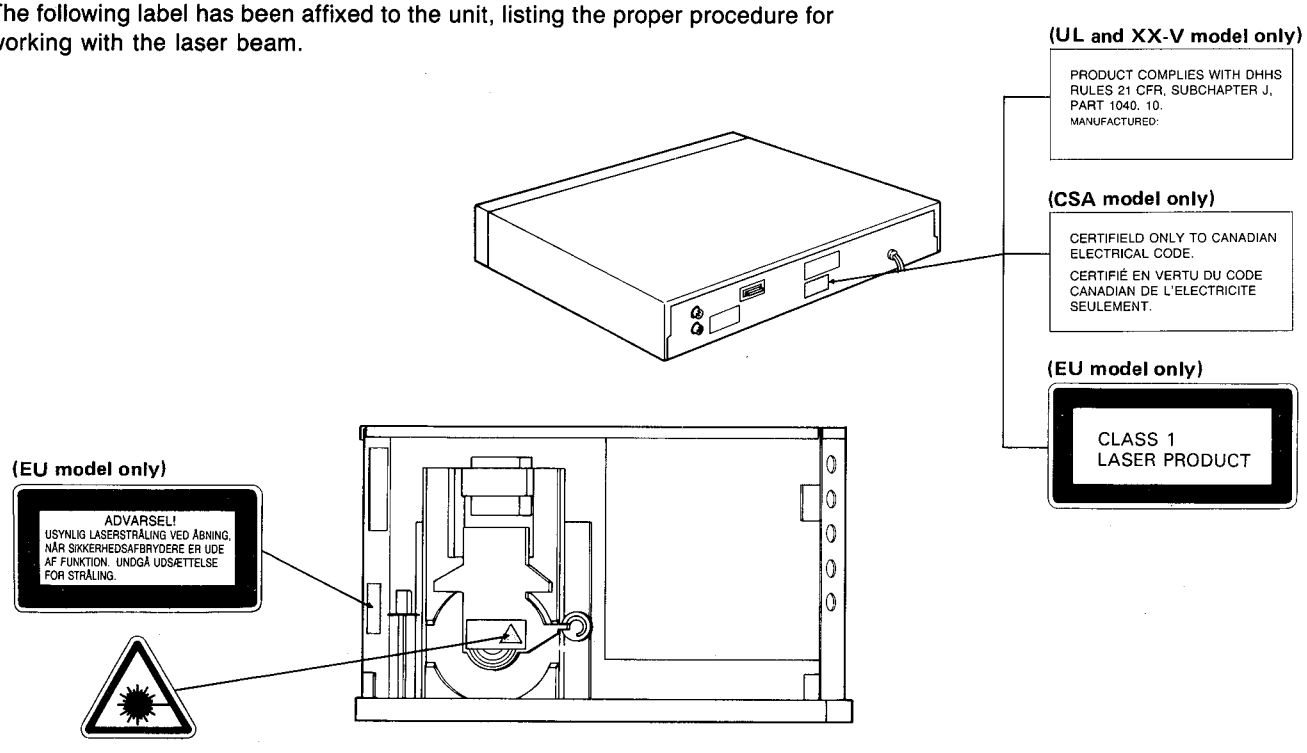
4. Abbreviations in this service manual are as follows.

•Abbreviations List

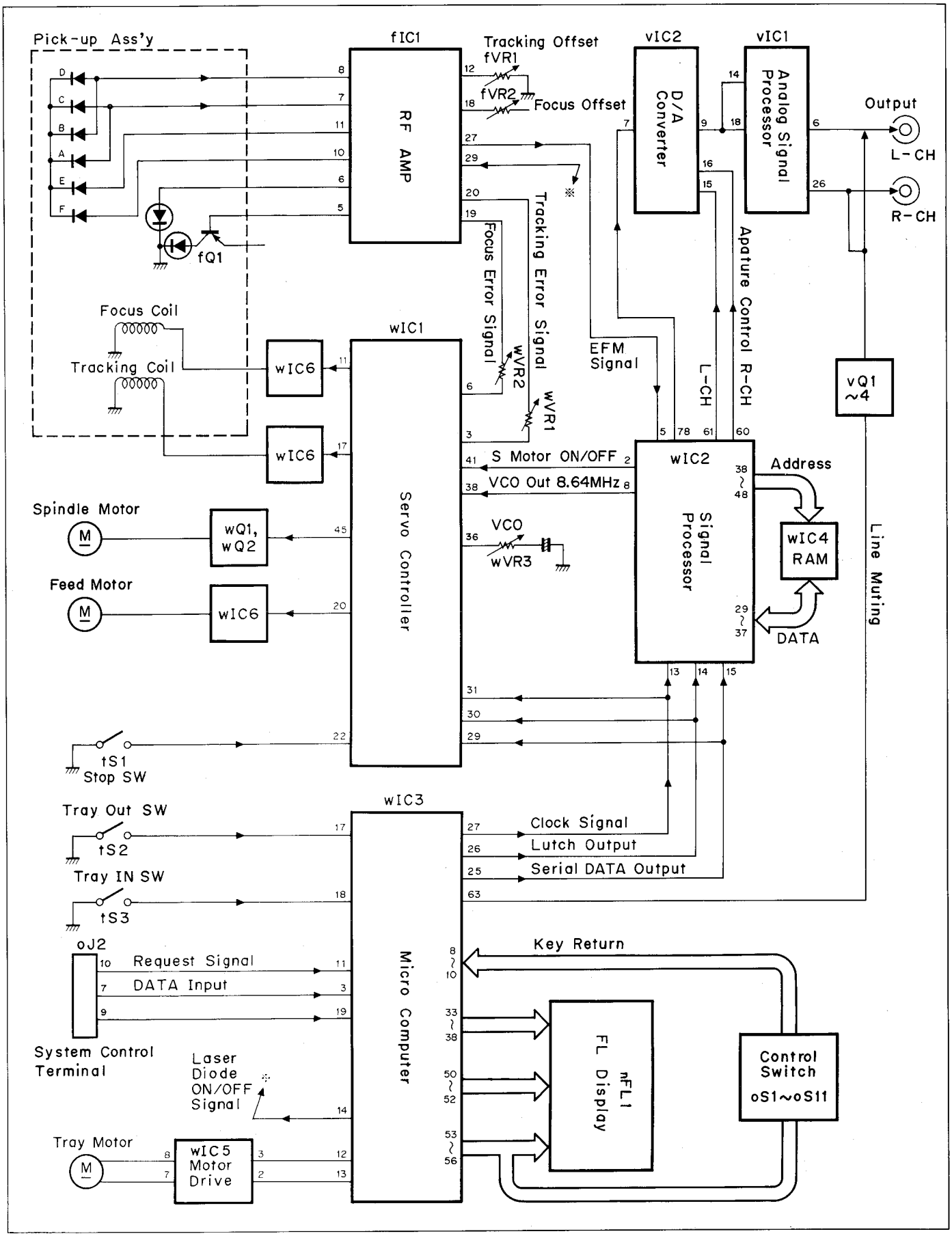
C.R.	: Carbon Resistor
S.R.	: Solid Resistor
Ce.R.	: Cement Resistor
M.R.	: Metal Film Resistor
F.R.	: Fusing Resistor
N.I.R.	: Non-Inflammable Resistor
A.R.	: Array Resistor
C.C.	: Ceramic Capacitor
C.T.	: Ceramic Capacitor, Temperature Compensation
E.C.	: Electrolytic Capacitor
E.L.	: Low Leak Electrolytic Capacitor
E.B.	: Bi-Polar Electrolytic Capacitor
E.B.L.	: Low Leak Bi-Polar Electrolytic Capacitor
Ta.C.	: Tantalum Capacitor
F.C.	: Film Capacitor
M.P.	: Metalized Paper Capacitor
P.C.	: Polystyrene Capacitor
G.C.	: Gimmic Capacitor
A.C.	: Array Capacitor
V.R.	: Variable Resistor
S.V.R.	: Semi Variable Resistor
SW.	: Switch
Chip R.	: Chip Resistor
Chip C.	: Chip Capacitor

Cautions Concerning Handling of The Laser

The following label has been affixed to the unit, listing the proper procedure for working with the laser beam.

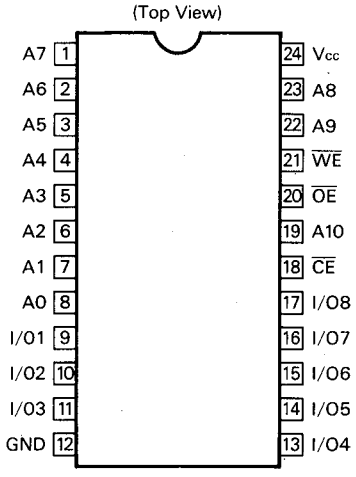

(UL and XX-V model only)
PRODUCT COMPLIES WITH DHHS RULES 21 CFR, SUBCHAPTER J, PART 1040. 10.
MANUFACTURED:
(CSA model only)
CERTIFIELD ONLY TO CANADIAN ELECTRICAL CODE.
CERTIFIÉ EN VERTU DU CODE CANADIAN DE L'ELECTRICITÉ SEULEMENT.
(EU model only)
CLASS 1
LASER PRODUCT
(EU model only)
ADVARSEL!
USYNLIG LASERSTRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.

1. BLOCK DIAGRAM



2. INTERIOR BLOCK DIAGRAM & TERMINAL FUNCTION OF IC

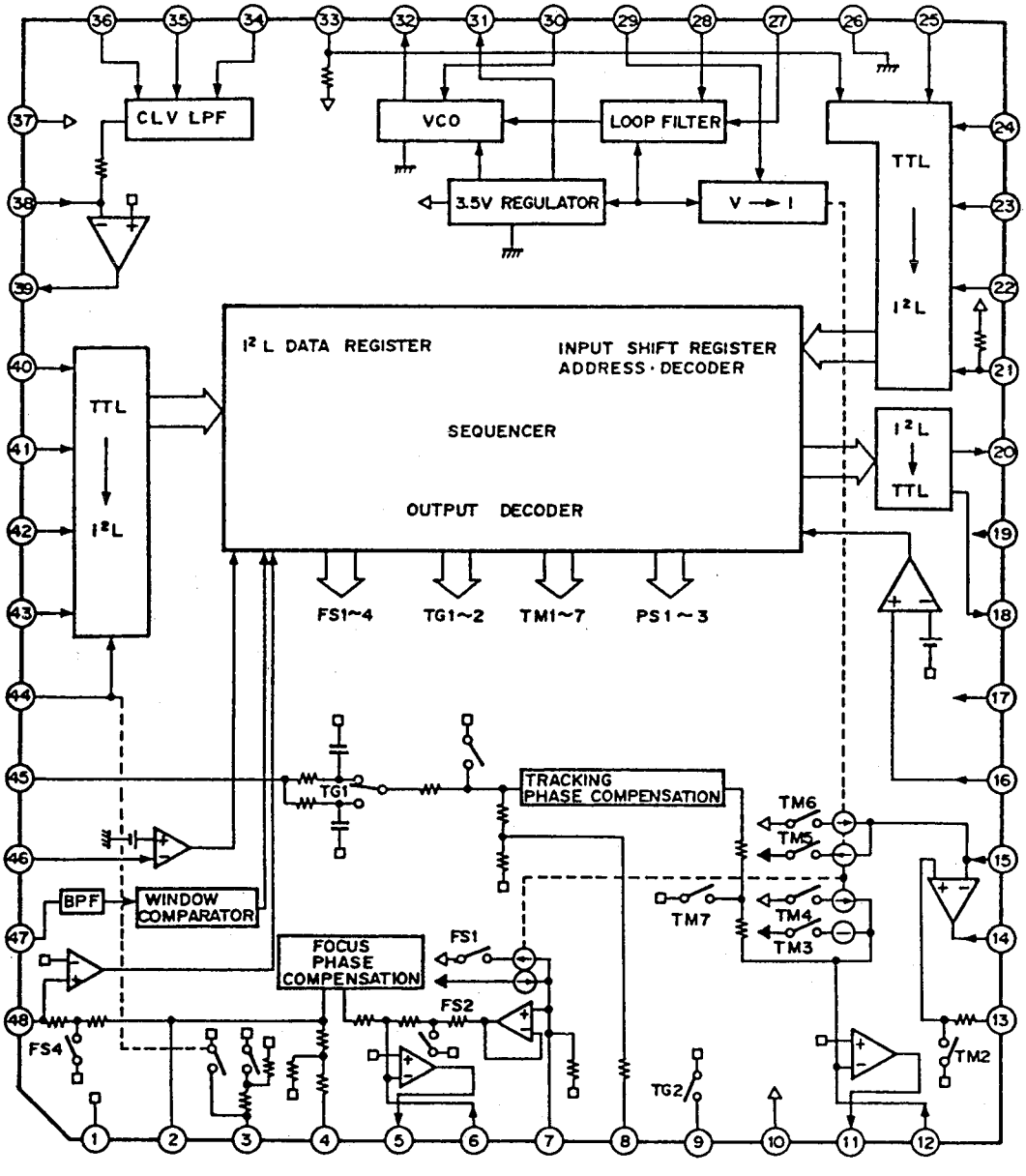
• CXK-5816 < RAM >



•Function

Port	Terminal Function
A0~A10	Address Input
I/01~I/08	Data input/Output
CE	Chip Enable
WE	Write Enable
OE	Output Enable
Vcc	+5V
GND	Ground

• CXA-1082 < Focus & Tracking Servo >

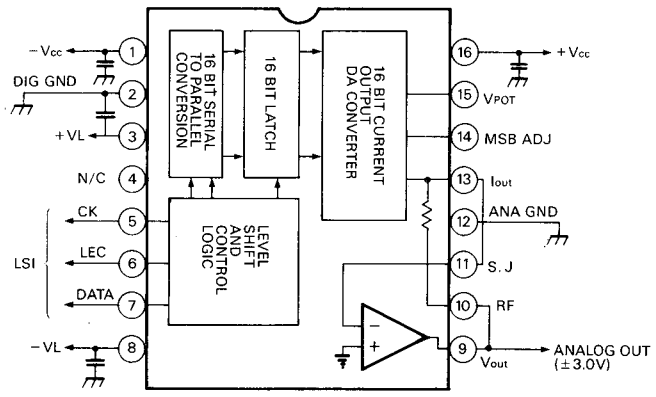


Description of Pin Functions (CXA-1082)

Pin No.	Pin Name	Function
2	FGD	A condenser is inserted between this pin and pin 3 to decrease focus servo high-frequency gain.
3	FS_3	Switches focus servo high-frequency gain when FS_3 is turned ON/OFF.
4	FLB	Input terminal for the time constant used to increase focus servo low-frequency characteristic.
5 11 14 39	FEO TAO SLO SPDLO	OP Amp output terminal for power transistor driver.
6	FE ⊖	Focus amplifier turnover input terminal.
7	SRCH	Input terminal for the time constant used to generate the focus search waveform.
8	TGU	Input terminal for the time constant used to switch high-frequency tracking gain.
9	TG2	Input terminal for the time constant used to switch high-frequency tracking gain.
12	TA ⊖	Tracking amplifier turnover input terminal.
13	SL ⊕	Thread amplifier non-turnover input terminal.
15	SL ⊖	Thread amplifier turnover input terminal.
16	SSTOP	Terminal for detecting innermost turn detection limit switch ON/OFF.
17	FSET	Terminal for setting focus tracking phase-compensation peaks and CLV LPF fo.
18 20	SENS C.OUT	Microcomputer interface output terminal.
21 22 23 24 25 33	DIRCT XRST DATA XLT CLK LOCK	Microcomputer interface input terminal. Pins 21 and 33 are provided with 47 kΩ pullup resistors.

Pin No.	Pin Name	Function
27	BW	Loop filter time constant input terminal.
28	PDI	CX23035/CXD1135 phase comparator output PDO input terminal.
29	ISET	Supplies the current used to determine focus search, track jump and thread kick height.
30	VCOF	VCO free-frequency is practically proportional to the resistance between this pin and pin 31.
32	C864	8.64 MHz VCO output terminal.
34	MDP	This terminal is connected to the CX23035/CXD1135 MDP terminal.
35	MON	This terminal is connected to the CX23035/CXD1135 MON terminal.
36	FSW	CLV servo error signal LDF time constant input terminal.
38	SPDL ⊖	Spindle drive amplifier turnover input terminal.
40 42 42 44	WDCK FOK MIRR DFCT	Interface input terminal for microcomputer, etc.
45	TE	Tracking error signal input terminal.
46	TZC	Tracking zero-cross comparator input terminal.
47	ATSC	ATSC detecting window comparator input terminal.
48	FE	Focus error signal input terminal.

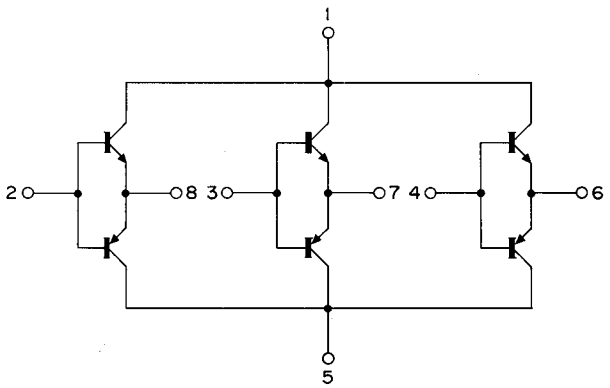
• PCM56 < 16 bit D/A Converter >



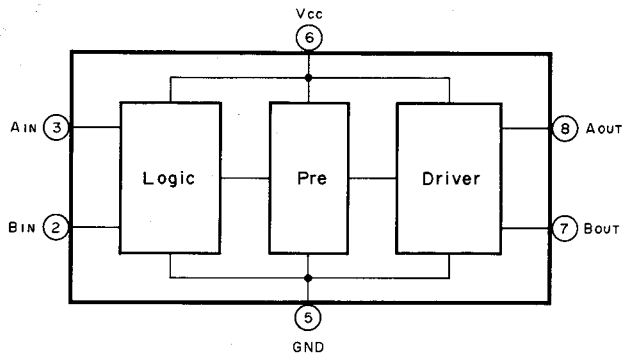
PIN NO.		FUNCTION
1	−Vcc	Analog power source (−)
2	DIG GND	Digital ground
3	+VL	Logic power source (+)
4	NC	No connection
5	CK	Clock input
6	LEC	Latch enable Control input
7	DATA	Data input
8	−VL	Logic power source (−)

PIN NO.		FUNCTION
16	+Vcc	Analog power source (+)
15	V POT	Potentiometer terminal
14	MSB ADJ	MSB adjustment terminal
13	I out	Current output
12	ANA GND	Analog ground
11	S.J	Summing Junction (op amp input)
10	RF	Feedback resistance
9	V out	Voltage output

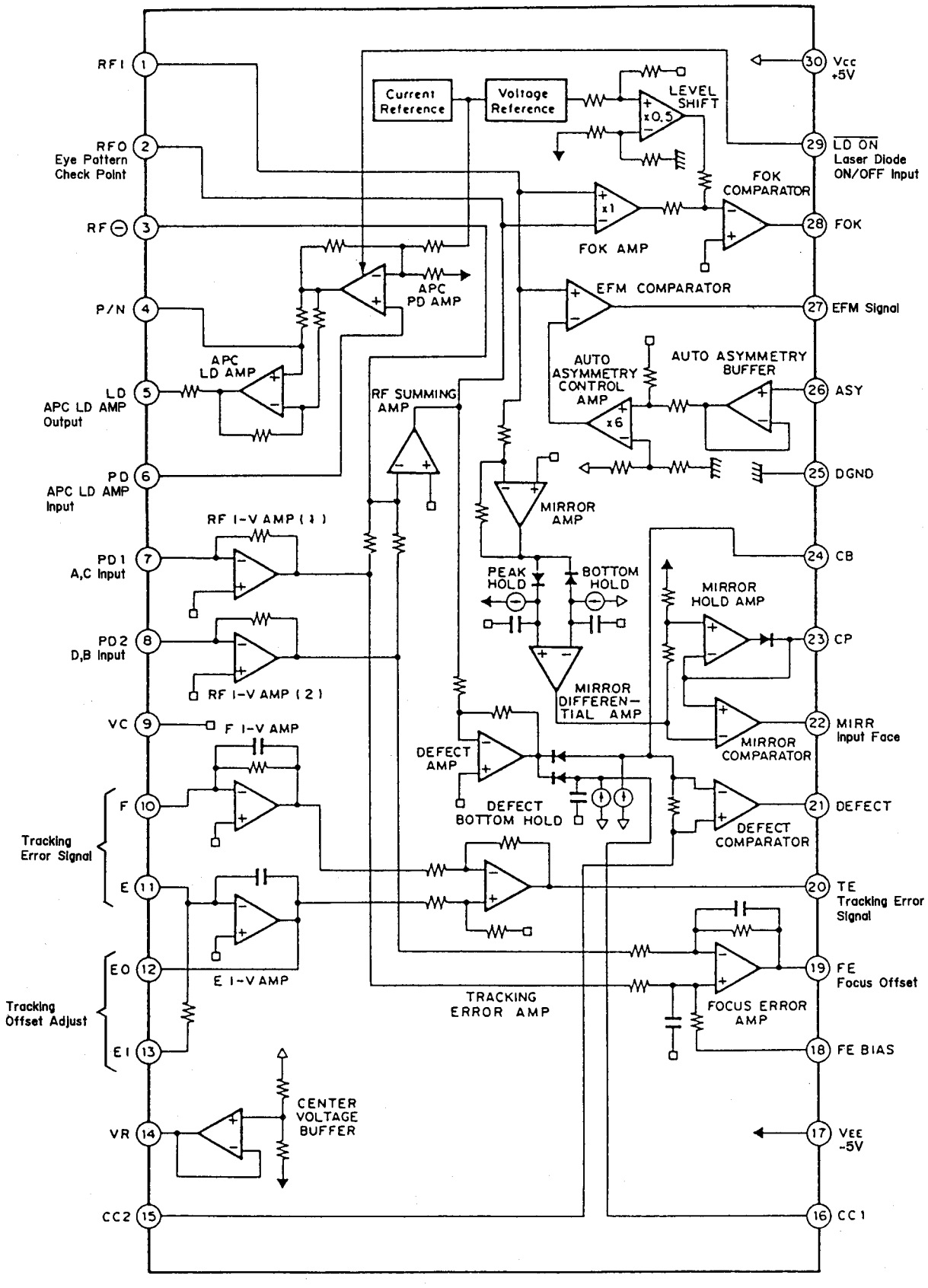
• STA341M (Transistor Array)



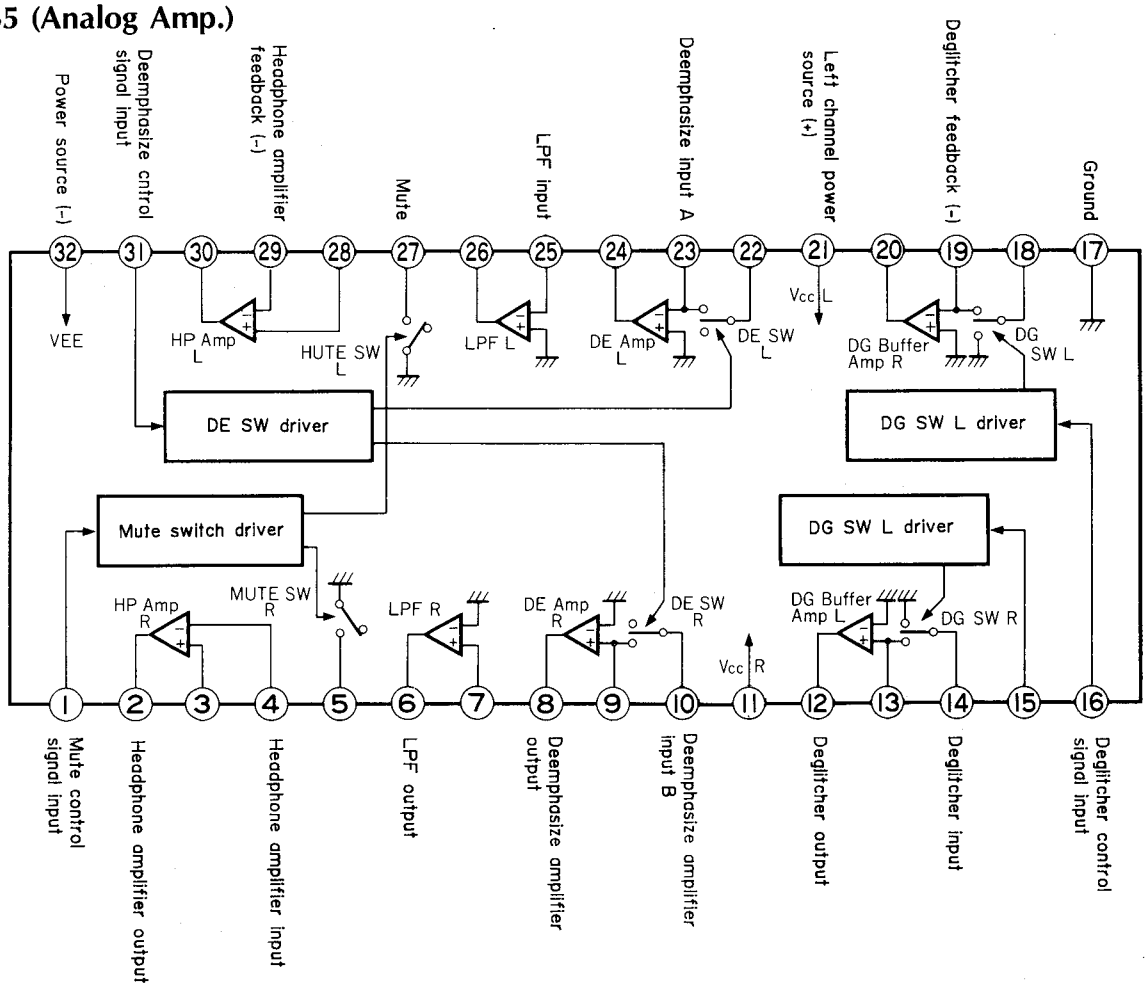
• BA6208 (Motor Drive)



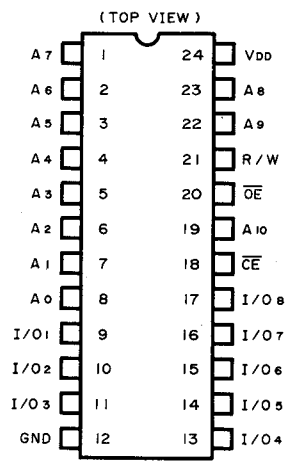
• CXA1081S (RF Amp.)

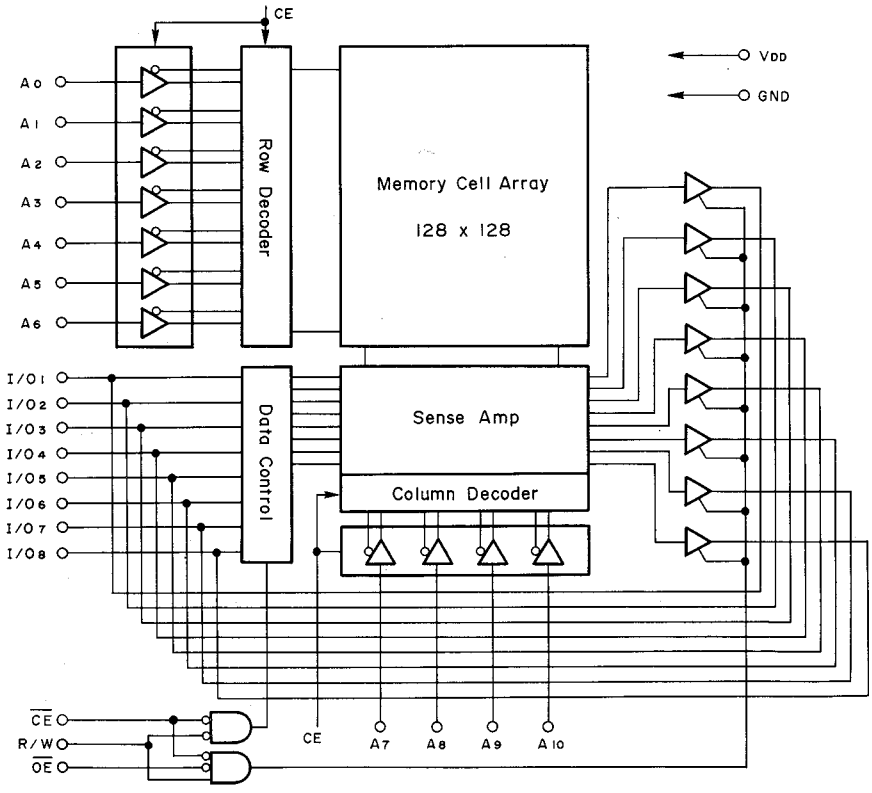


• M51565 (Analog Amp.)



• MB8416-20/TC5517AP-2/μPD446C-2 < RAM >





Pin Name	
A0 ~ A10	Address input
R/W	Read/Write input
$\overline{OE}$	Output Enable Input
$\overline{CE}$	Chip Enable Input
I/O1 ~ I/O8	Data Input/Output
VDD/GND	Power Terminal

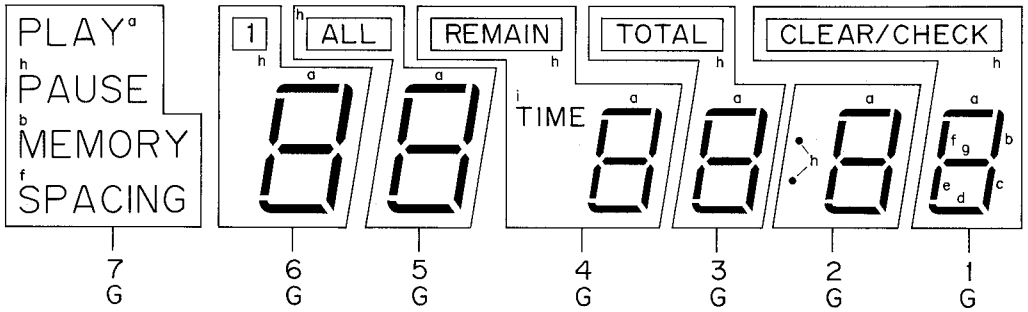
• Description of Pin Functions (CXP5016 Microcomputer)

Function	Pin No.	I/O	Active H	Active L
Key matrix dynamic scan output. A matrix is formed between these pins and pins 8, 9 and 10 for input function selection.	53	O	○	
	54	O	○	
	55	O	○	
	56	O	○	
Muting output. Active except during playback and manual search.	24	O	○	
Serial data output.	25	O		
Latch output.	26	O		
Serial data transfer clock input.	27	O		
At "H" level output, the loading motor rotates in the tray closing direction.	12	O	○	
At "H" level output, the loading motor rotates in the tray opening direction.	13	O	○	
Laser diode ON/OFF control output.	14	O		○
System reset output.	15	O		○
Key matrix input. Select the input function in combination with pins 53 to 56.	8	I	○	
	9	I	○	
	10	I	○	
Inputs requests from components connected to the system control terminal.	11	I	○	
Inputs the signal indicating proper focus pull-in.	20	I	○	

Function	Pin No.	I/O	Active H	Active L
Frame sync locked condition indicating input.	21	I		
Address condition indicating input.	22	I		
When the tray has come fully out and the DISC TRAY switch is turned ON, this pin becomes "L".	17	I		○
When the tray has come fully in and the DISC TRAY switch is turned ON, this pin becomes "L"	18	I		○
Synchro Play.	19	I	○	
Subcode Q readout signal.	4	SC		
Timer play input.	5	I		○
Test input terminal.	6	I		○
Subcode Q input.	7	SI		
Line mute output. Active except during playback and manual search.	63	O	○	
Analog amplifier (M51565P) deemphasis switch control output.	1	O	○	
Data input from components connected to the system control terminal.	3	I	○	
4.2336 MHz clock input.	61	I		
Subcode sync S0 + S1 input.	60			
Fluorescent indicator output.	33~40	O	○	
Fluorescent indicator output.	50~52	O	○	

• Fluorescent Display Tube

< Grid Assignment >



< Pin Connection >

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
CONNECTION	F	NP	g	e	c	d	b	f	a	h	i	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	7G	6G	5G	4G	3G	2G	1G	NP	F

< Anode Connection >

	7G	6G	5G	4G	3G	2G	1G
a	PLAY	a	a	a	a	a	a
b	MEMORY	b	b	b	b	b	b
c	—	c	c	c	c	c	c
d	—	d	d	d	d	d	d
e	—	e	e	e	e	e	e
f	SPACING	f	f	f	f	f	f
g	—	g	g	g	g	g	g
h	PAUSE	1	ALL	REMAIN	TOTAL	⋮	CLEAR/CHECK
i	—	—	—	TIME	—	—	—

Description of Pin Functions (CXD-1135 Digital Signal Processor)

Pin No.	Pin Name	I/O	Function
1	FSW	O	Spindle motor output filter time constant switching output.
2	MON	O	Spindle motor ON/OFF control signal output.
3	MDP	O	Spindle motor drive output. For CLV-S mode rouch control and CLV-P mode phase control.
4	MDS	O	Spindle motor drive output. For CLY-P mode speed control.
5	EFM	I	RF amplifier EFM signal input.
6	ASY	O	EFM signal slice level control output.
7	LOCK	O	The GFS singal is sampled at WFCK/16; if "H", "H" is output through this terminal. If "L" for 8 consecutive times, "L" is output.
8	VCOO	O	VCO output. When locked to the EFM signal, 5 = 8.6436 MHz.
9	VCOI	I	VCO input.
10	TEST	I	(0 V)
11	PDO	O	EFM signal and VCO/Z phase comparison output.
12	V_{ST}	—	Ground (0 V)
13	CLK	I	CPU serial data transfer clock input. Data is latched at the clock rising edge.
14	XLT	I	CPU latch input. Latches 8-bit shift register data (serial data from the CPU) to the registers.
15	DATA	I	CPU serial data input.
16	XRST	I	System reset input. Reset is performed at "L" input.
17	CNIN	I	Tracking pulse input.
18	SENS	O	Outputs internal condition data for each address.
19	MUTG	I	Muting input. When the internal register ATTM is "L", MUTG sets the normal condition at "L" input, and the muted condition at "H" input.
23	SUBQ	O	Subcode Q output.
24	SCOR	O	Subcode sync S0 + S1 output.
25	SQCK	I/O	Subcode Q readout clock.
26	SQEX	I	SQCK selection input.
28	GFS	O	Frame sync locked condition indicating output.
29	DB_{08}	I/O	External RAM data terminal. $DATA_8$ (MSB)
30	DB_{07}	I/O	External RAM data terminal. $DATA_7$
31	DB_{06}	I/O	External RAM data terminal. $DATA_6$
32	DB_{05}	I/O	External RAM data terminal. $DATA_5$
33	V_{DD}	—	Power (+5 V)
34	DB_{04}	I/O	External RAM data terminal. $DATA_4$
35	DB_{03}	I/O	External RAM data terminal. $DATA_3$
36	DB_{02}	I/O	External RAM data terminal. $DATA_2$
37	DB_{01}	I/O	External RAM data terminal. $DATA_1$ (LSB)
38	RA_{01}	O	External RAM address output. $ADDR_{01}$ (LSB)
39	RA_{02}	O	External RAM address output. $ADDR_{02}$
40	RA_{03}	O	External RAM address output. $ADDR_{03}$
41	RA_{04}	O	External RAM address output. $ADDR_{04}$
42	RA_{05}	O	External RAM address output. $ADDR_{05}$
43	RA_{06}	O	External RAM address output. $ADDR_{06}$
44	RA_{07}	O	External RAM address output. $ADDR_{07}$
45	RA_{08}	O	External RAM address output. $ADDR_{08}$
46	RA_{09}	O	External RAM address output. $ADDR_{09}$
47	RA_{10}	O	External RAM address output. $ADDR_{10}$
48	RA_{11}	O	External RAM address output. $ADDR_{11}$
49	RAWE	O	Write enable signal output to the external RAM (active at "L").
50	RACS	O	Chip select signal output to the external RAM (active at "L").
51	C_4M	O	X'tal division output. f = 4.2336 MHz.
52	V_{SS}	—	GND (0V)
53	XTAI	I	X'tal oscillator circuit input. f = 8.4672 MHz or 16.9344 MHz, depending on the selected mode.
54	XTAO	O	X'tal oscillator circuit output. f = 8.4672 MHz or 16.9344 MHz, depending on the selected mode.
55	MD_1	I	Mode selection $input_1$.
56	MD_2	I	Mode selection input2.
57	MD_3	I	Mode selection $input_3$.
58	SLOB	I	Audio data output code switching input. 2's complement output at "L", and offset binary output at "H".
59	PSSL	I	Audio data output mode switching input. serial output at "L", and parallel output at "H".
70	DA_{09}	O	Outputs DA_{09} when PSSL = "H", and $\overline{PLCK}$ when PSSL = "L".
71	DA_{10}	O	Outputs DA_{10} when PSSL = "H", and UGFS when PSSL = "L".
72	DA_{11}	O	Outputs DA_{11} when PSSL = "H", and GTOP when PSSL = "L".
73	V_{DD}	—	Power (+5 V).
74	DA_{12}	O	Outputs DA_{12} when PSSL = "H", and RAOV when PSSL = "L".
75	DA_{13}	O	Outputs DA_{13} when PSSL = "H", and C_4LR when PSSL = "L".
76	DA_{14}	O	Outputs DA_{14} when PSSL = "H", and $\overline{C_{21}O}$ when PSSL = "L".
77	DA_{15}	O	Outputs DA_{15} when PSSL = "H", and $C_{21}O$ when PSSL = "L".
78	DA_{16}	O	Outputs DA_{16} (parallel audio data MSB) when PSSL = "H", and DATA when PSSL = "L".
79	WDCK	O	Strobe signal output. 176.4 kHz at DF ON, and 88.2 KHz at DF OFF.
80	LRCK	O	Strobe signal output. 88.2 kHz at DF ON, and 44.1 KHz at DF OFF.

NOTES: C1F1: C1 decoding error correction condition data monitoring output.
C1F2:
C2F1: C2 decoding error correction condition data monitoring output.
C2F2:
C2FL: Correction condition data output. "H" when the C2 line under processing cannot be corrected.
C2P0: C2 pointer indication output. Synchronized to the audio data ouptut.
RFCK: Read frame clock output. 7.35 kHz of x'tal system.
WFCK: Write frame clock output. 7.35 kHz when locked to the x'tal system.
$\overline{PLCK}$: VCO/2 output. f = 4.3218 MHz when locked to the FFM signal.
UGFS: Unprotected frame sync pattern output.
GTOP: Frame synchronization protected condition indication output.
RAOV: ±4-frame jitter absorbing RAM overflow/underflow indicating output.
$\overline{C4LR}$: Strobe signal. 352.8 kHz at DF ON, 176.4 kHz at DF OFF.
$\overline{C210}$: C210 turnover output.
C210: Bit clock output. 4.2336 MHz at DF ON, 2.1168 MHz at DF OFF.
DATA: Audio signal serial data output.

3. PARTS LIST OF CIRCUIT BOARD

3-1. F-5802 Digital/Analog & Logic Control Board (Stock No.01071001)

Parts List

Parts No.	Stock No.	Description
·Transistor		
⚠ mQ1	48000901	2SC2060
⚠ mQ2	48000801	2SA934
·IC		
⚠ mIC1	46359400	L78N05
⚠ or	48599500	AN78N05
⚠ mIC2	48600700	AN79N05
·Diode		
⚠ mD1	03117700	10E-2
⚠ or	83005000	1N4002
⚠ mD2	03117700	10E-2
⚠ or	83005000	1N4002
⚠ mD3	03117700	10E-2
⚠ or	83005000	1N4002
⚠ mD4	03117700	10E-2
⚠ or	83005000	1N4002
·Zener Diode		
mDZ1	46111500	05Z5.6-Y
or	46111600	05Z5.6-Z
or	46825000	RD5.6E-B2
or	46825100	RD5.6E-B3
mDZ2	46111500	05Z5.6-Y
or	46111600	05Z5.6-Z
or	46825000	RD5.6E-B2
or	46825100	RD5.6E-B3
·Diode		
⚠ nD1	03117700	10E-2
⚠ nD2	03117700	10E-2
⚠ nD3	03117700	10E-2
⚠ nD4	03117700	10E-2
⚠ nR1	41401400	3.3Ω 1/2W N.I.R
oJ1	48528400	2P Terminal,OUTPUT
·Transistor		
vQ1	46367101	2SC2603
or	48058801	2SC1740S
vQ2	46367001	2SA1115
or	48058601	2SA933S
vQ3	46367101	2SC2603
or	48058801	2SC1740S
vQ4	46367001	2SA1115
or	48058601	2SA933S
·IC		
vIC1	48840100	M51565P
vIC2	48666800	PCM56P
·Diode		
vD1	03117600	1S2473T77
or	46086000	1S1588TP-3
·Transistor		
wQ1	48000901	2SC2060
wQ2	48000801	2SA934
wQ3	46367101	2SC2603
or	48058801	2SC1740S
wQ4	46367101	2SC2603
or	48058801	2SC1740S
wQ5	48000901	2SC2060
·IC		
wIC1	48840000	CXA1082AS
wIC2	48839800	CXD1135QZ
wIC3	48839600	CXP5016H-200Q
wIC4	48718000	TC5517AP-2
or	48718100	μPD446C-2
or	48718200	MB8416-20
or	48839700	CXK5816PN-12L
wIC5	46149600	BA6208
wIC6	48667300	STA341M
wX01	48592500	Quartz Element HC-49/U
·Diode		
wD5	03117600	1S2473T77
or	46086000	1S1588TP-3
·Zener Diode		
wDZ1	46112700	05Z8.2-Y
or	46112800	05Z8.2-Z
or	46826200	RD8.2E-B2
or	46826300	RD8.2E-B3
wR30	46346000	22kΩX6 1/8W A.R.
wVR1	46634500	22kΩ S.V.R.,Tracking Gain
or	83009300	20kΩ S.V.R.,Tracking Gain
wVR2	46634500	22kΩ S.V.R.,Focus Gain
or	83009300	20kΩ S.V.R.,Focus Gain
wVR3	46633900	2.2kΩ S.V.R.,VCC
or	83009000	2kΩ S.V.R.,VCC

3-2. F-5803 Control SW. & Display Board (Stock No.01071101)

Parts List

Parts No.	Stock No.	Description
oS1	46708100	Push SW., ▶
or	83000300	Push SW., ▶
oS2	46708100	Push SW., ■
or	83000300	Push SW., ■
oS3	46708100	Push SW., ▶▶
or	83000300	Push SW., ▶▶
oS4	46708100	Push SW., ◀◀
or	83000300	Push SW., ◀◀
oS5	46708100	Push SW., ▶▶|
or	83000300	Push SW., ▶▶|
oS6	4670810C	Push SW., |◀◀
or	83000300	Push SW., |◀◀
oS7	46708100	Push SW.,MEMORY
or	83000300	Push SW.,MEMORY
oS8	46708100	Push SW.,REPEAT
or	83000300	Push SW.,REPEAT
oS9	46708100	Push SW.,AUTO SPACING
or	83000300	Push SW.,AUTO SPACING
oS10	46708100	Push SW.,DISPLAY
or	83000300	Push SW.,DISPLAY
oS11	46708100	Push SW.,OPEN/CLOSE
or	83000300	Push SW.,OPEN/CLOSE
·Transistor		
wQ6	46367001	2SA1115
or	48058601	2SA933S
·Diode		
wD1	03117600	1S2473T77
or	46086000	1S1588TP-3
wD2	03117600	1S2473T77
or	46086000	1S1588TP-3
wD3	03117600	1S2473T77
or	46086000	1S1588TP-3
wD4	03117600	1S2473T77
or	46086000	1S1588TP-3

3-3. F-5804 System Control Terminal Board

Parts List

Parts No.	Stock No.	Description
oJ2	48313900	ST Socket(10 Pin)
·Diode		
wD6	46464100	1SS133
wC33	48663000	220pF 50V C.C.
wC34	48663000	220pF 50V C.C.
wC35	48663000	220pF 50V C.C.

3-4. F-5835 FL. Display Tube Board

Parts List

Parts No.	Stock No.	Description
nFL1	48835800	FL.Display Tube

3.5- F-5749 RF/Servo Board (Stock No.01043801)

Parts List

Parts No.	Stock No.	Description
·Transistor		
fQ1	46359701	2SA952
or	48000801	2SA934
·IC		
fIC1	48839900	CXA1081S
·Diode		
fD1	46464100	1SS133
fL1	48289400	Inductor 10μH
fVR1	48079400	22kΩ S.V.R.,Tracking Offset
fVR2	48079400	22kΩ S.V.R.,Focus Offset

3-6. F-5805 Line Filter Board

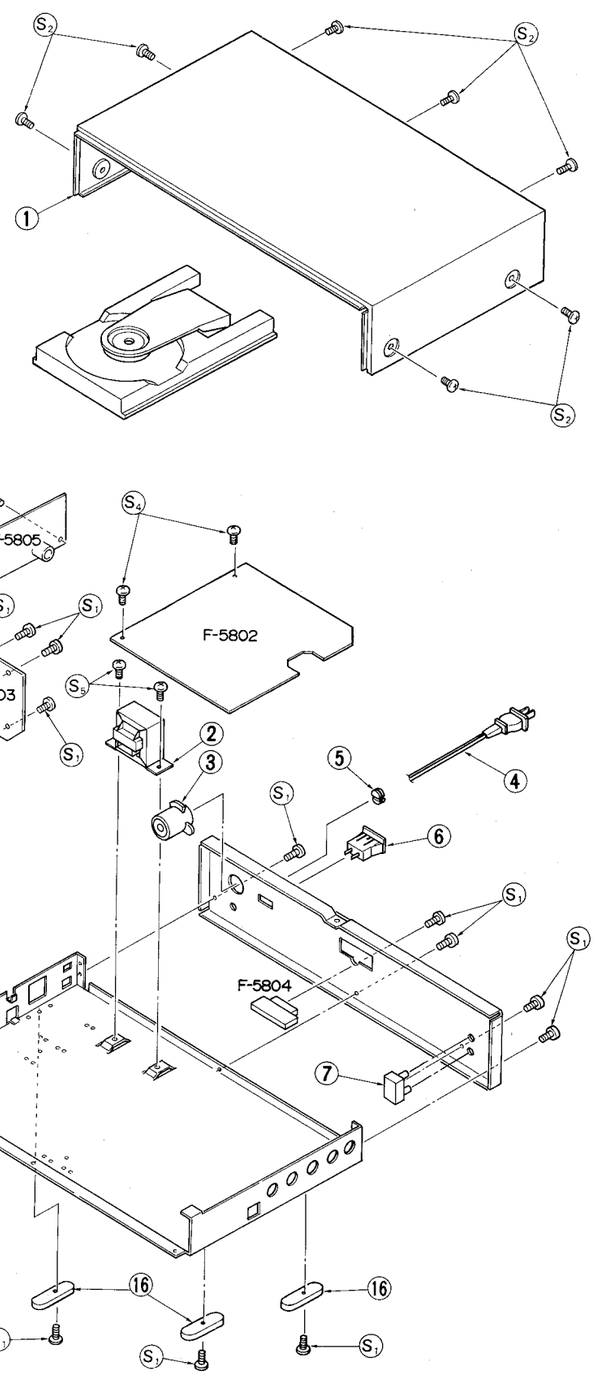
Parts List

Parts No.	Stock No.	Description
⚠ PC1	48733500	0.01μF 400V C.C.
⚠ PL1	48727800	Line Filter LF-2C
⚠ PF2	07184700	1A AC Fuse (SEV)

Parts List < Screw & Washer >

Parts No.	Stock No.	Description
S1	00454500	3X8 Tapping Screw,Yellow
S2	00455400	3X8 Tapping Screw,Black
S3	00425400	3X6 Binding Screw,Yellow
S4	51625100	3X8 Washer Head Tapping Screw,Yellow
S5	00424100	4X8 Washer Head Binding Screw,Black
S6	46911800	2.5X6 Washer Head Tapping Screw,Yellow
S7	13044800	2.5X5 Binding Screw,Yellow
S8	13301100	2X8 Tapping Screw,Yellow
S9	51625200	3X10 Washer Head Tapping Screw,Yellow
W1	00463600	3φ NUT
W2	14557000	4φ NUT
W3	27364300	2.5φ Slit Washer
W4	27364600	6.6φ Thrust Washer

4-2. Exploded View of Set



4. EXPLODED VIEW & PARTS LIST

4-1. Parts List

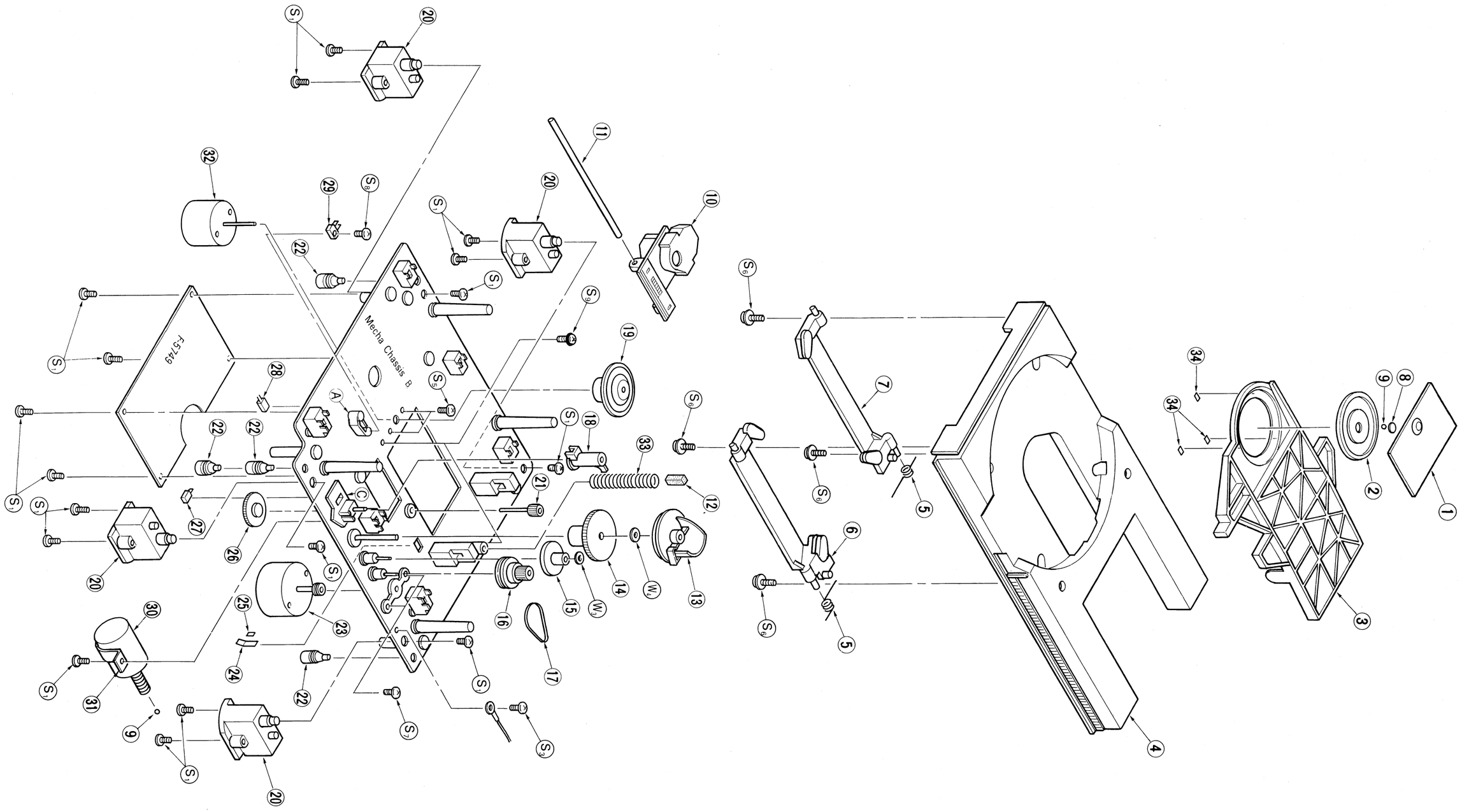
Parts List < Set >

Parts No.	Stock No.	Description
1	27454300	Bonnet
⚠ 2	15029609	Power Transformer(XX-V)
⚠ or	83004609	Power Transformer(XX-V)
⚠	83004602	Power Transformer(UL,CSA)
⚠ or	15029602	Power Transformer(UL,CSA)
⚠	83004605	Power Transformer(EU,UK,SEV)
⚠ or	15029605	Power Transformer(EU,UK,SEV)
⚠ 3	07204700	Voltage Selector(EU,UK,SEV)
⚠	48484200	Voltage Selector(XX-V)
⚠ 4	38005400	Power Supply Cord(XX-V)
⚠	48837700	Power Supply Cord(SS)
⚠	48187600	Power Supply Cord,Polarized(XX)
⚠	48187500	Power Supply Cord(UL,CSA)
⚠	38004500	Power Supply Cord(EU,SEV)
⚠	38004300	Power Supply Cord(UK)
5	39106000	Strain Relief(XX-V,UL,CSA)
	48913500	Strain Relief(SS,UK,EU,SEV)
⚠ 6	46364900	AC Outlet(XX-V,SS)
⚠	48184000	AC Outlet,Polarized(UL,CSA)
⚠	46161000	AC Outlet(EU,SEV)
⚠	46364800	AC Outlet(UK)
7	48528400	2P Output Terminal
8	48835800	FL Display Tube
9	27454600	Front Panel Ass'y,black(UL,CSA)
	27454500	Front Panel Ass'y,black(XX-V)
	27454700	Front Panel Ass'y,gray (XX-V,EU,UK,SEV)
	27454800	Front Panel Ass'y,gray(UL,SCA)
10	27453400	Knob,POWER
11	27453100	Tray Panel,black
	27491400	Tray Panel,gray
12	27454000	Knob,DOWN,black
	27491710	Knob,DOWN,gray
13	27454100	Knob,UP,black
	27491810	Knob,UP,gray
14	27453200	Joint Bar
⚠ 15	46364300	Push switch,POWER
16	27453300	Foot Ass'y

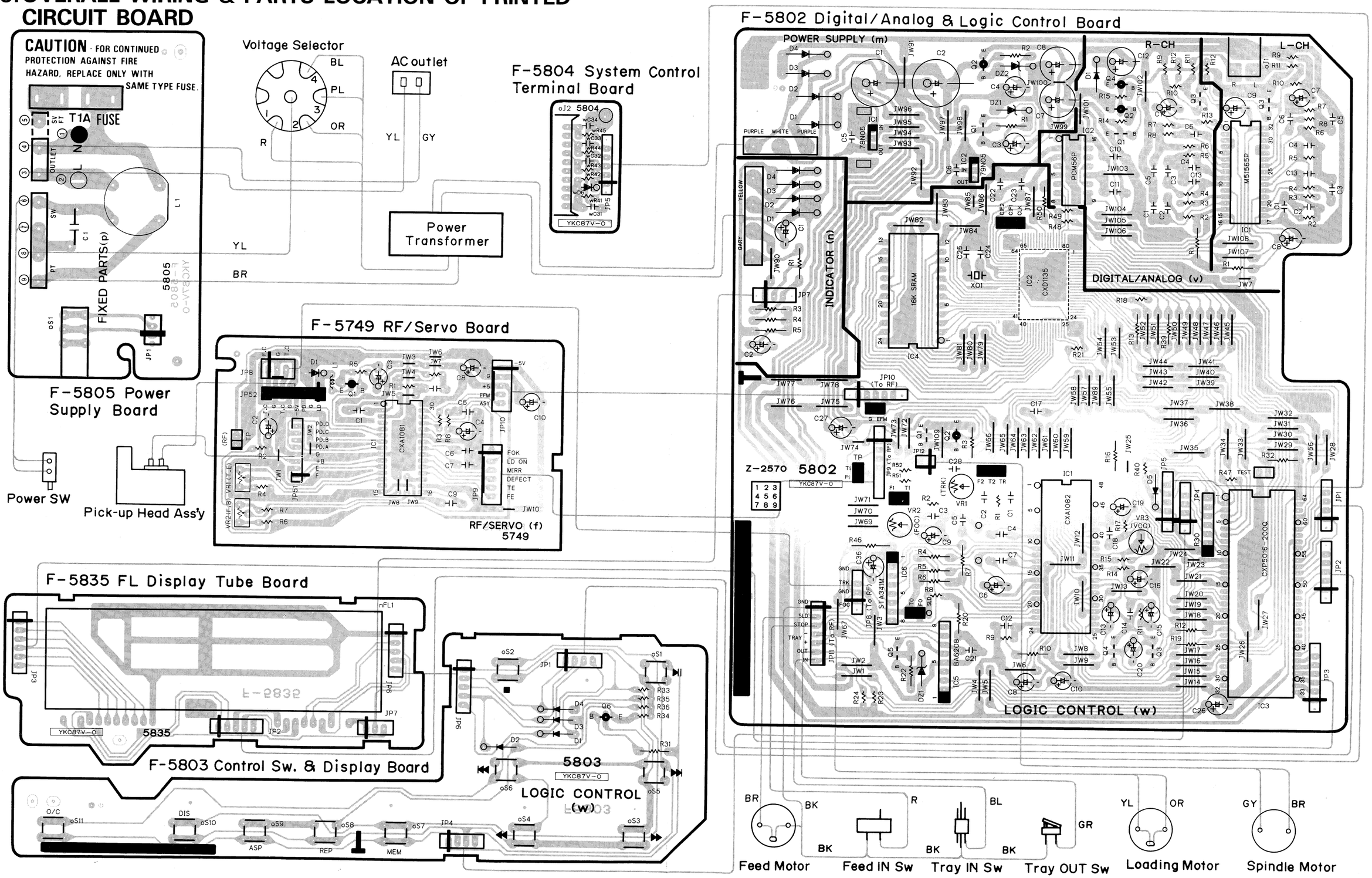
Parts List < Mechanism Ass'y >

Parts No.	Stock No.	Description
1	27365600	Clamp Cover
2	27365700	Clamp Plate
3	27365800	Clamp Arm
4	27366700	Disc Tray
5	27364800	Spring
6	27423400	Right Lifter Ass'y
7	27423300	Left Lifter Ass'y
8	27365400	Thrust Plate
9	27279100	Steel Ball
10	48830500	Pick-up Head Ass'y
11	27363800	Support Rail
12	27364500	Spring Damper
13	27367000	Cam Gear
14	27364000	Drive Gear
15	27365200	L Gear
16	27422600	L Pulley
17	27422700	Belt
18	27364700	Switch Arm
19	27364110	Turn Table
20	27462110	CD Holder
21	27364910	Sending Gear A
22	27364400	Floating Rubber
23	18159100	Loading Motor Ass'y (with pulley)
24	27365500	Plate Spring
25	27379410	Spacer
26	27365000	Sending Gear B
27	48574400	Loading IN Detector Switch
28	48793900	Feed IN Detector Switch
29	48829000	Loading OUT Detector Switch
30	18159300	Feed Motor Ass'y (with worm gear)
31	27366600	Motor Band
32	48584900	Spindle Motor
33	27364200	Spring Clamp Arm
34	27423200	Cushion Sheet

4-3. Exploded View of Mechanism Ass'y



5. OVERALL WIRING & PARTS LOCATION OF PRINTED CIRCUIT BOARD

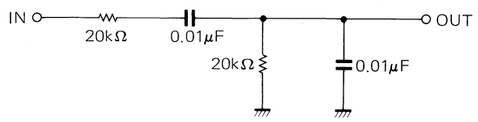


6. ADJUSTMENTS

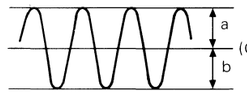
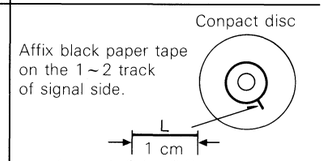
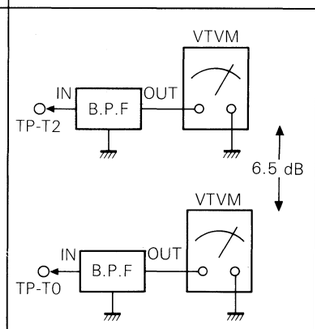
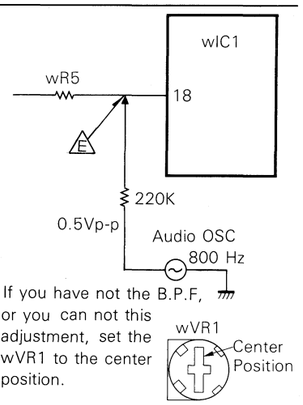
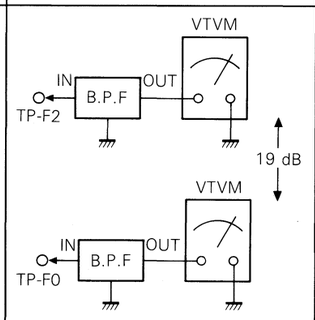
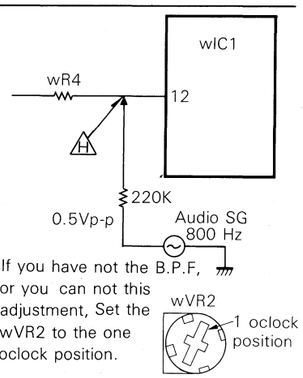
• Notes on Adjustment

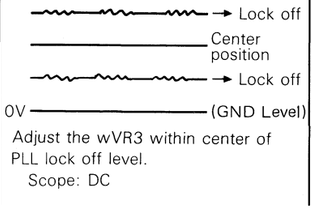
1. Turn off power before removing bonnet.
2. See Fig. 6-1 & 6-2 for adjustment.
3. Test discs is CD-1 of EIAJ.
4. For adjustment the following filters is required.

Band Pass Filter (B.P.F.)

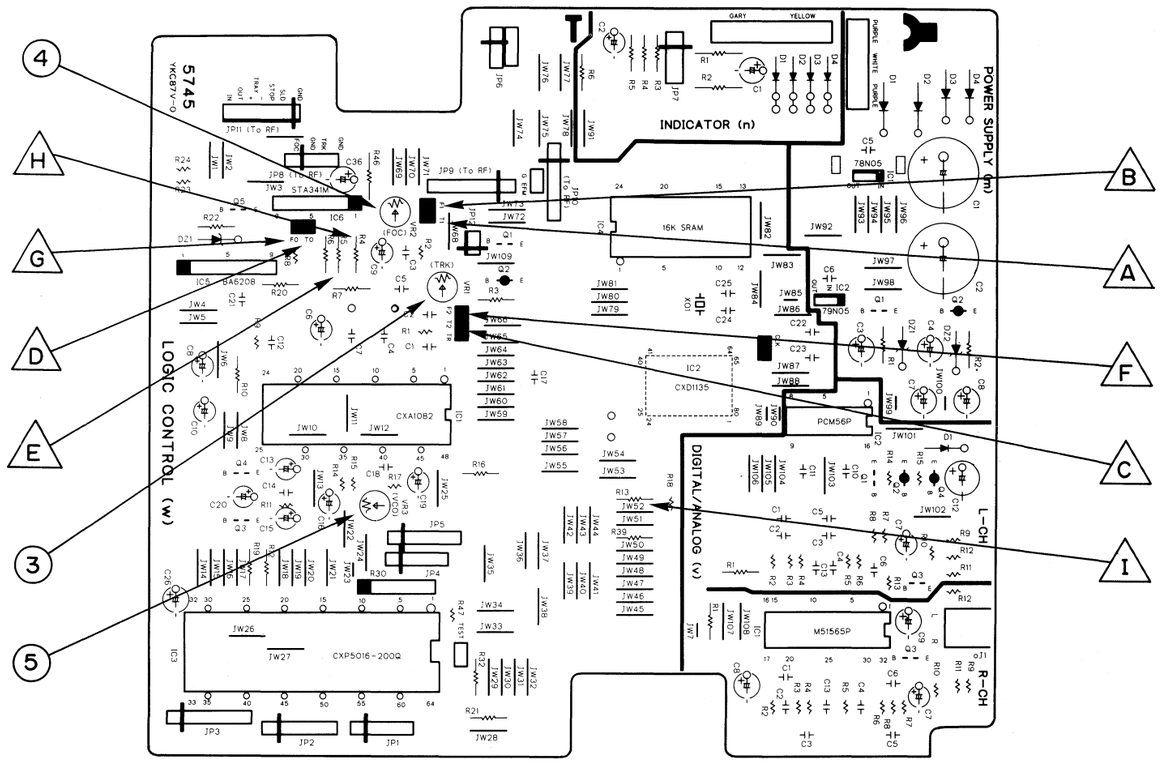


5. In case the play operation is not by defective adjustment, adjust the following a process.
   1. Initially set fVR1, fVR2, wVR1 and wVR2 at their center positions.
   2. **Adjust wVR3 (VCO adj.) slightly until the set will be normal play.**

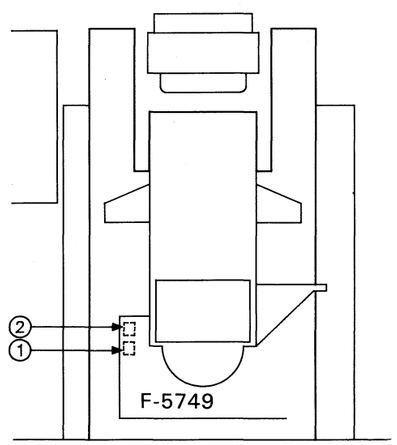
STEP	SUBJECT	INPUT	ADJUST. FOR	MEASURE OUTPUT	ADJUST	DESCRIPTION
1	Tracking Offset	Play 8th music of CD-1.	fVR1 ① (F-5749) short across wR5 Ⓔ	Connect scope to point Ⓐ (TP-T1)	 Adjsut a = b Scope: DC	
2	Focus Offset	Play 1st music of CD-1 with Black Paper Tape	fVR2 ② (F-5749)	Connect ch1 of scope to Point Ⓑ (TP-F1) Connect ch2 of scope to TP TR Ⓧ	Adjsut a = b Adjust Point © to center position	 w: 1 mm t: 0.1~0.3 mm
3	Tracking Gain	Play 4th music of CD-1 (No signal) Feed 800Hz 0.5Vp-p from S.G. into wR5 Ⓔ	wVR1 ③ (F-5802)	Connect VTVM to Point Ⓒ (TP-T2) through Band Pass Filter. Connect VTVM to point Ⓓ (TP-T0) through Band Pass Filter	 Adjust TP-T0 level to +6.5 dB from VTVM Indication level of TP-T2.	 If you have not the B.P.F, or you can not this adjustment, set the wVR1 to the center position.
4	Focus Gain	Play 8th music of CD-1 Feed 800 Hz 0.5Vp-p from S.G. into wR4 Ⓗ	wVR2 ④ (F-5802)	Connect VTVM to Point Ⓕ (TP-F2) through Band Pass Filter. Connect VTVM to Point Ⓖ (TP-F0) through Band Pass Filter.	 Adjust TP-F0 level to +19 dB from VTVM Indication level of TP-F2.	 If you have not the B.P.F, or you can not this adjustment, Set the wVR2 to the one oclock position.

STEP	SUBJECT	INPUT	ADJUST. FOR	MEASURE OUTPUT	ADJUST	DESCRIPTION
5	V.C.O	Play 8th music of CD-1.	wVR3 ⑤ (F-5802)	Connect scope to point Ⓘ (wR13)	 Adjust the wVR3 within center of PLL lock off level. Scope: DC	

• F-5802 Digital/Analog & Logic Control Board (Fig. 6-1)

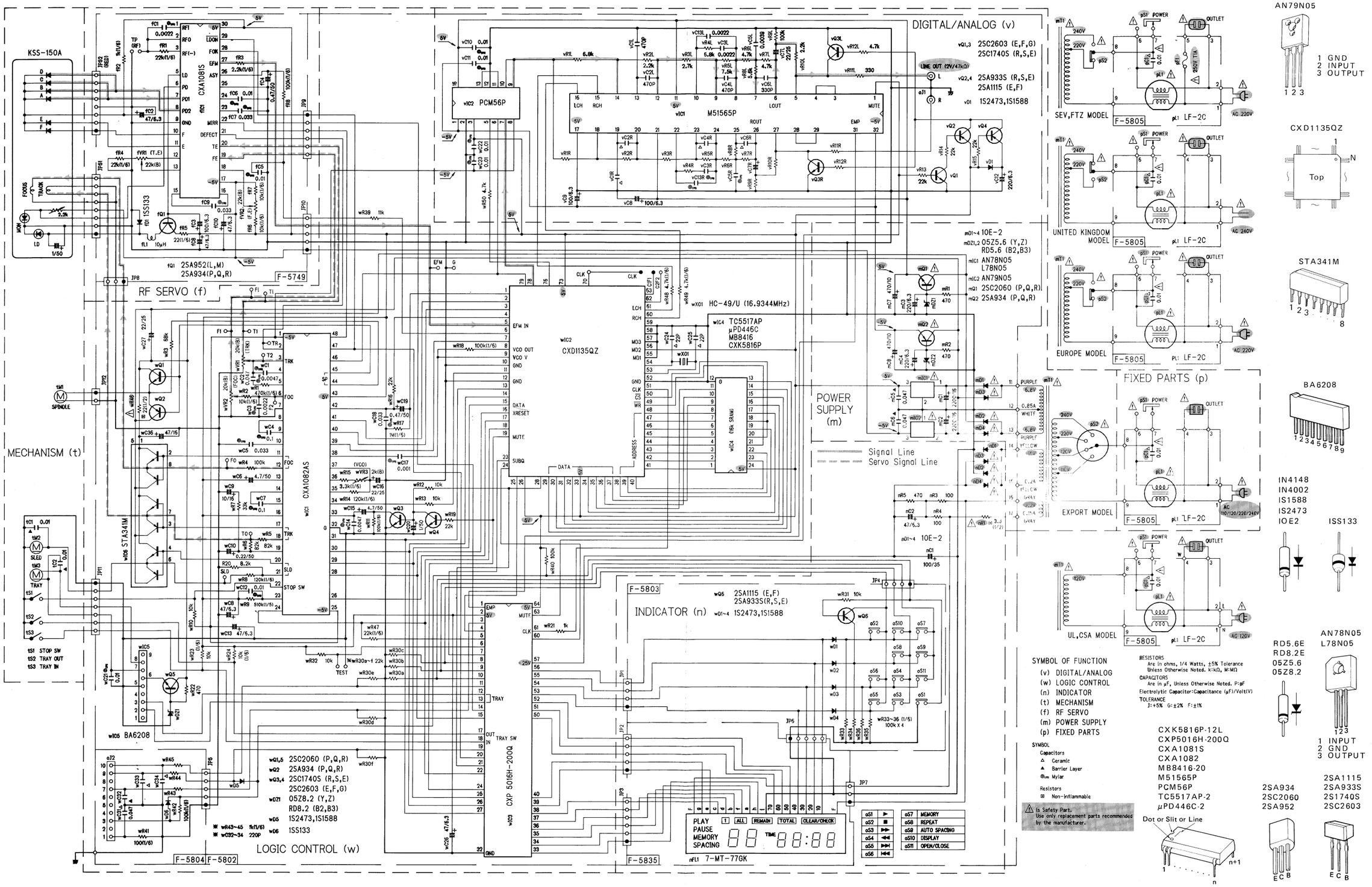


• Top View (Fig. 6-2)



7. SCHEMATIC DIAGRAM

- Design and specifications subject to change without notice for improvement.
- La présention et les spécifications sont susceptibles d'être modifiées sans préavis par suites d'améliorations éventuelles.
- Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.



8. HOW TO REPLACE MAIN PARTS (See Exploded View on Page 9, 10)

A. Bonnet (1)

1. Remove the two screws on either side and the two screws on the rear panel.

B. Disc Tray (4) (See Fig. 8-1 and 8-2)

1. Remove the bonnet.
2. Turn the L gear (15) in the direction of the arrow until the clamp arm (3) is fully up.
3. Grasp the disc tray with your hand and pull it forward until it is secured by the leaf switch holder (A).
4. Turn the switch holder fully counterclockwise (in the direction of the arrow).
   Note: Be sure to set the switch holder back in its original position after instailing the disc tray.
5. Pull the disc tray out forward.

Fig. 8-1

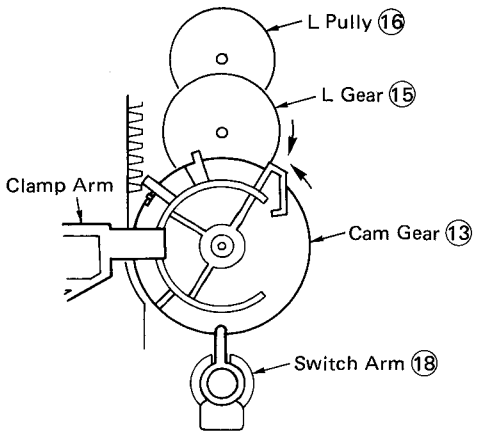
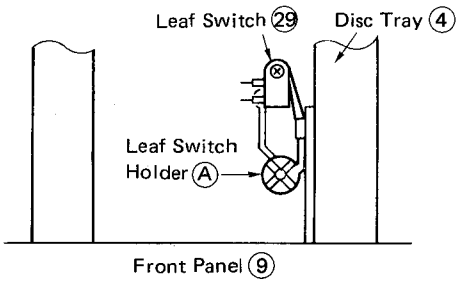


Fig. 8-2



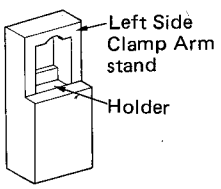
C. Front Panel Assembly (9)

1. Remove the Disc Tray (4).
2. Remove the two screws securing the front panel, the three screws on the bottom.
3. Detach F-5803 and F-5835 from the front panel.

D. Clamp Arm Assembly (3) (See Fig. 8-3)

1. Remove the bonnet (1).
2. Press the OPEN button, opening the disc tray (4).
3. Push the holder in the clamp arm stand, and detach clamp arm ass'y from clamp arm stand.

Fig. 8-3



E. Mechanism Chassis (B)

1. Remove the bonnet and the disc tray.
2. Remove the four fixing screws (S1).
3. Remove the ground wire fixing screw (S3).
4. The mechanism chassis can now be turned over.

F. Spindle Motor (32)

1. Remove the bonnet.
2. Remove the disc tray and the clamp arm.
3. Detach the turntable (19) from the spindle motor shaft.
4. Remove the two spindle fixing screws (S5).
   NOTE ON INSTALLATION: Adjust the height of the turntable as follows: Insert the turntable into the motor shaft, place a level regulator on the top, and press in until the regulator touches the shaft. (Make the tip of the shaft and the tip of the turntable the same height.)

G. Pick-up Head Assembly (10)

1. Remove the bonnet.
2. Remove the disc tray and the clamp arm.
3. Remove the two pick-up mounting screws (S9).
4. Disconnect the two lead connectors to RF/servo board F-5749.
5. Remove the supporting rail (11).

■ Cautions When Removing The Laser Pick-up For Repairing (See Fig. 8-4)

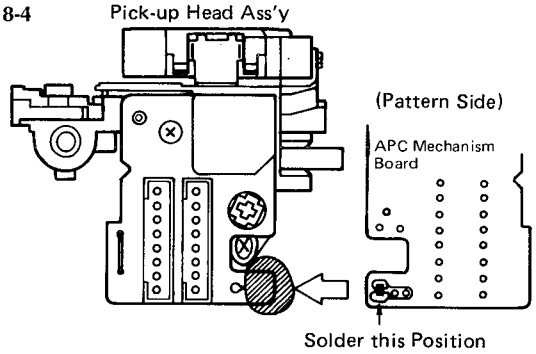
Before removing the laser pick-up, short-circuit the terminals by soldering. This is to prevent damage to the pick-up during removal operation.

1. Solder the pick-up terminals.
2. Detach 2 lead connectors.

■ Cautions When Replacing The Laser Pick-up

1. Insert the 2 pick-up lead connectors into the APC mechanism PCB.
2. Detach the short-circuited pick-up terminal soldering.
   * The terminal is factory sldered for protection, so use the same procedure when replacing the pick-up with a new one.

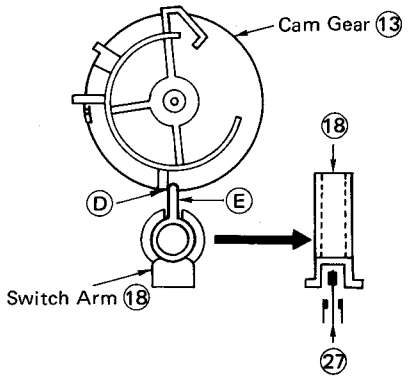
Fig. 8-4



H. Loading Belt (17) (See Fig. 8-5)

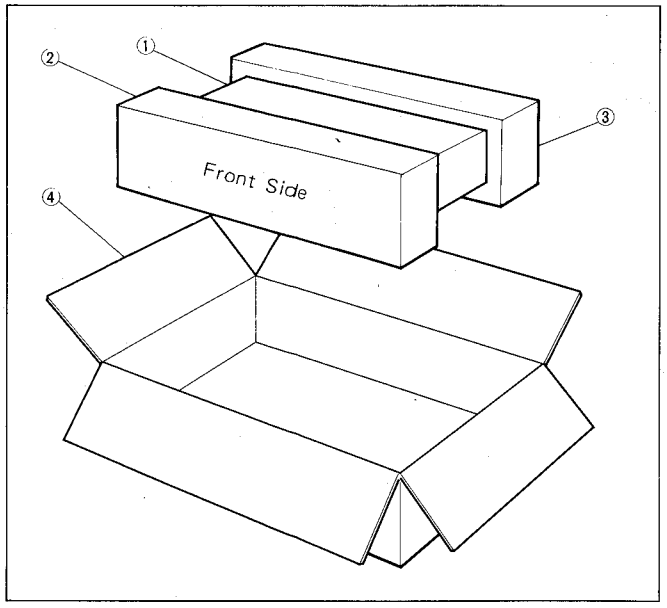
1. Remove the bonnet.
2. Open the hook switch arm holder (C) outward and remove the switch arm.
3. Remove the cam gear (13) and drive gear (14).
4. Remove the slit washer (W4) and the L gear (15).
5. Remove the square belt (17).
   NOTE ON INSTALLATION: Do as follows when installing the switch arm last:
   - Set so that part (D) on the can gear is to the left of part (E), the arm of the switch arm.
   - Set so that the center armature of the leaf switch (27) is in the bottom of the switch arm.

Fig. 8-5



9. PACKING LIST

Parts No.	Stock No.	Description
1	27343800	Vinyl Bag
2	27455300	Styrofoarm Packing(Front)
3	27455200	Styrofoarm Packing(Rear)
4	27452700	Carton Case,black
	27493100	Carton Case,gray



10. ACCESSORY LIST

Stock No.	Description
46118600	PJP Cord
or 38103200	PJP Cord
49030500	Operating Instruction (*E·F·S)
49030600	Operating Instruction (*G·I·Sw)
49035600	Remote Controller sheet
07641240	Safty Instruction (UL)

***Note:**
E.F.S: English. French and Spanish Version
G.I.Sw: German. Italian and Swedish Version

SANSUI

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SANSUI ELECTRONICS (U.K.) LTD.: Unit 10A, Lyon Industrial Estate, Rockware Avenue, Greenford, Middx UB6, OAA, England
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